

**Minutes of the Carlisle Board of Health  
April 7, 2009**

Present: Board Members Jeff Brem(Chairman), Chris Deignan, Bill Risso, Michael Holland; absent - Leslie Cahill; also present: Linda Fantasia (Agent); Rob Frado (TCG); Ginny Lamere (Carlisle Mosquito)

The meeting was called to order at 7:15 p.m. at the town hall.

**WATER SAMPLING PROPOSAL** – Tony Mariano, Sr. presented a proposal for water and rock sampling in conjunction with the USGS study being conducted. USGS is investigating area bedrock wells to assess concentrations of arsenic and uranium. A similar study was done in New Hampshire which has the same belt of bedrock. As a second step USGS and DPH will study whether there is an associated health risk due to elevated levels. Mariano, who is a geologist by profession and a member of the Water Quality Subcommittee, had spoken with John Colman of USGS. Mariano is very familiar with the rock types in Carlisle and offered his expertise. He is not convinced that there is a problem with either arsenic or uranium based on his own knowledge of the minerals in Carlisle, but it might be helpful for the Board to do some testing of the rocks and water. This would be an additional layer of information beyond the USGS study. There is money available to the Board for this purpose. Mariano would be willing to coordinate the sampling.

Mariano proposes to sample about ten rock areas. He has a lab in Canada that would do the testing. The focus would be mainly on arsenic and uranium but other trace elements would be examined. The easiest way to obtain samples would be when a new well was drilled. The driller could pull a water sample and tailings might provide rock samples. There would be an initial cost of about \$100 per well to analyze the rock. Another \$1000 could be used to confirm the mineralogy. The entire scope of work could be done for about \$3000. Mariano would map the locations.

As for health risks, there are many variables to consider. If residents are worried about their water, they should have it tested and if there is a problem, have the water filtered. Arsenic is naturally occurring, but higher levels might be found in land used for agriculture since it is a component of many herbicides. Uranium may also be found in the rock in Carlisle. USGS is trying to determine how these elements go into solution. Brem asked whether USGS would consider sharing some of the cost of the study. He asked Mariano to check.

If the Board agrees to the testing, Mariano would like the WQS to meet and prepare a scope of work. The Board noted that water conditions can change within a few feet because of bedrock fractures and soil conditions.

Also present for the discussion was Mark St. Hilaire of Atlas Water Treatment Co. who gave a brief explanation of the types of filtration possibility for treating arsenic and uranium. A typical water softener does not do this. Ion exchange removes arsenic but it requires a specialized treatment medium. Many homeowners are also interested in removing radon. Disposal of the medium can be a problem. St. Hilaire said systems can run from \$1800 to \$3400 for full treatment. Systems that remove arsenic and uranium must be tested every six months, so there is an ongoing maintenance cost. Mariano said a municipal water supply comes already treated into the home. People still seem to prefer private wells. (Holland arrives).

The Board agreed it is interested in doing the study and will set up a meeting for the WQS.

**PH 58 WOLF ROCK ROAD – replacement of a failed soil absorption system requiring a local waiver: 15.221 General Construction Requirements - every new soil absorption system constructed in Carlisle shall meet the following design flow requirements: four Bedrooms 600 GPD required, 440 GPD provided.**

**Plan entitled “Septic System Repair, 58 Wolf Rock Road, Carlisle MA, Prepared for Kent Gonzales, Designed by Martinage Engineering Assoc. Inc., revised 4/2/09”.**

The hearing was opened. Present were: Kent Gonzales, owner, John Martinage and Dave Martinage, engineers.

Gonzales explained that following previous discussions with the Board, they had decided to submit a Presby system using Title 5 design flows of 440 GPD instead of the 600 GPD required under local regulations. This will result in a significant cost savings due to the reduced grading. The system is in the best location overall for the site. It only requires one barrier wall. An additional tank will be added along with a pump chamber. An extensive effort was made to consider various alternatives. The applicant stated that it would be manifestly unjust to require a fully compliant system due to the significant cost and that the proposed design is the best suited for the site and provides an equal amount of protection because of alternative technology. The Board agreed with reasons for the waiver as findings. The plan had been reviewed by Rob Frado and all of the deficiencies had been addressed with the exception of adding the waiver to Sheet #1 and a note that there are no systems within 50' of the proposed design. There were no public comments.

It was moved (Risso) and seconded (Deignan) to approve a waiver from the Carlisle Supplementary Regulations 15.221 General Construction Requirements for 58 Wolf Rock Road in accordance with plan entitled "Septic System Repair, 58 Wolf Rock Road, Carlisle MA, Prepared for Kent Gonzales, Designed by Martinage Engineering Assoc. Inc., revised 4/2/09". Motion passed 4-0-0.

It was moved (Risso) and seconded (Holland) and unanimously voted to close the public hearing.

**MINUTES** – It was moved (Risso) and seconded (Deignan) to approve the minutes of 3/17/09. Motion passed 3-0-1 (Brem was absent).

**BILLS** – It was moved (Risso) and seconded (Deignan) to approve the bills as presented. Motion passed 4-0-0.

## **ADMINISTRATIVE REPORTS**

Region 4A Funding Allocation – Fantasia reported that the February coalition vote was invalid according to DPH. A revised distribution will be presented in Wayland on 4/9/09. This distribution increases the base funding per town from \$2000 to \$3000. Additional funding is population based. Under the equal distribution Carlisle would receive \$3807.82; under the blended formula \$3210.62 for a loss of \$597.20. Fantasia said the revised formula would probably pass although she would vote against it in favor of the equal distribution as directed by the Board. There is no need for Board Members to attend.

Emergency Preparedness –Fantasia would like to start work on a section for the Red Balloon Phonebook.

FY09 Budget - \$473 is not being restored. The Board has not yet received the \$10,000 from the septic loan program.

Carlisle Schools WWTP – GWDP renewal application; DEP requires more information on the monitoring well locations. Risso said DEP is doing an onsite inspection tomorrow. He will be there.

Ice Creams Stands – Kimballs opening 4/8/09. It passed an inspection today. A new water test is needed. Fantasia had spoken with the Westford BOH and there were no problems with the manufacturing operation. Great Brook hopes to open 4/17/09. It has not been inspected.

Carlisle Schools – is up to date on inspections. Brem noted that he was now ServSafe Certified.

**84 SOUTH STREET – septic system upgrade. Plan entitled: Septic System Upgrade, 68-84 South Street, owned by New South Street Realty Tr, designed by R. Wilson & Assoc. dated January 30, 2009.**

Present were Drew Garvin of R. Wilson Assoc. and Chip Orcutt, property manager.

Orcutt had met with the Board previously to discuss the upgrade. The existing system consists of two fields, one of which has failed because of a faulty siphon chamber. The other field is fully functional. The proposed design calls for using the single leaching area for the current office facility. A new splitter distribution box would be installed so that flows could be diverted to either field or both as needed. A new Presby system would also be installed for future

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use. Frado's review noted a number of deficiencies in the design. Actual flows are 2010 GPD. Title 5 requires pressure dosing for systems  $\geq 2000$  GPD. The design does not provide for this. The Board agreed that a Presby system cannot be pressure dosed. The Board also questioned the design flow criteria being used for the new field. Orcutt explained that the original system of 10,000 GPD was constructed in 1967 for a hospital/nursing home. The property was converted to an office building and rental housing in 1981 and flow requirements were reduced to 7500 GPD. The owner wants to maintain this capacity in order to protect the value of the property which includes a zoning special permit for the business even though the new field will not be put into use until sometime in the future. Holland said that a Disposal Construction Permit needs to be for an intended use. This has not been identified. Holland said there are a number of Title 5 issues which should have been considered in the design, including the need for pressure dosing, how this can be done with a gravity fed system, and the design criteria for the new field. Garvin thought DEP might waive the pressure dosing since the current flows are only slightly over the threshold for pressure dosing. The Board suggested taking a closer look at the actual office building dimensions. Orcutt agreed that numbers were probably rounded. There is also storage in the building which would not count. They would also like to add a kitchen and lunchroom for employees.

Holland suggested using the current field without pressure dosing as long as the design flows for the office building are under 2000 GPD. If the flows are only slightly over, they could ask for a variance from DEP. Holland offered to check with Claire Golden of DEP. The next step would be to provide a design flow rational for the new field. Brem noted that Title 5 requires groundwater mounding analysis for large systems. Garvin said this would not be possible for the existing field due to high groundwater. The percolation rate is good at 5mpi so additional separation is not required. Garvin said he would try to get his questions answered at DEP and will also check Presby Enviro Systems on whether a Presby can be used for flows over 2000 GPD. Orcutt agreed to reconsider the filing and design plan based on the questions and comments presented.

**PH 110 MAPLE STREET – septic system upgrade requiring two local waivers for 15.211 Distances - soil absorption system to wetlands, 100' required, 81' provided, and 15.11 General Provisions, Paragraph (4) – a pre-existing non-conforming system shall not be used to support the construction of a new dwelling, or rebuilding of a demolished building - applicant proposes to demolish existing house and rebuild in same location.**

**Plan entitled: "Subsurface Sewage Disposal System, 110 Maple Street, Map 13, parcel 74, designed by Stamski & McNary, Inc, revised 3/26/09"**

The hearing was opened. Present were Joe March of SMI, and Mr. and Mrs. Pietropaolo, owners.

March explained that the owners were following the advice of the Board from the last meeting. They are asking for a modification of the original waiver granted for the septic system. They are proposing to demolish and enlarge the existing three bedroom house to a four bedroom one. A new trench will be added to the leaching area. The capacity will then meet local requirements of 600 GPD with no garbage grinder. The existing system was installed in 1995. It required a waiver for 80' setback to wetlands. A recent delineation of the wetland shows that the wetland has reduced in size. Because of the change in the wetland, the new trench will not cause the system to be less non-conforming than originally approved. The reserve area identified will be 89' from the wetland line. March presented the Board with a narrative describing the environmental benefits. A Notice of Intent has been filed with the Conservation Commission. The wetland line was delineated by B & C. The only other alternative would require relocating the house and well which would be much more disruptive to the site. All of the work will be done in a very compact area. The house will be rebuilt in the same footprint. It will be a very modest sized house (2800 sf). Because of its deteriorated condition, it does not make sense economically to renovate the house. Holland noted that the existing system did not benefit from the granting of Title 5 waivers, only a local setback waiver. Although the owners plan to demolish and rebuild a new house with a non-conforming system, it is within the scope of the original waiver granted for the system.

The Board made the following findings:

- The proposed design will increase the capacity of the existing three bedroom system to a four bedroom system;

- Replacing the system would create undue hardship to the applicant since the system which was installed in 1995 passed a Title 5 inspection on 8/29/07;
- Although the existing system is non-conforming it did not benefit from the granting of Title 5 variances, only a local waiver for distance to wetlands;
- The addition of the new trench does not increase the non-conformity of the system since the wetland line has receded and the location of the new trench and reserve area are greater than originally approved;
- The selected location of the new trench represents the most practical and environmentally sensitive location in that the additional grading will be minimized, it is not possible to site the trench on the southerly side because of the property line, if placed on the northerly side the well and house would need to be relocated closer to the wetlands, the work area will remain compact within an existing disturbed yard area and will be no closer than the existing leaching area footprint to wetlands;
- Renovation of the existing house is uneconomical due to its current condition and the number of code violations to be addressed; the house will remain of modest size and be located in the same footprint.
- A Garbage Grinder Deed Restriction must be recorded on the property deed with proof of recording submitted to this office prior to release of a construction permit.
- The Conservation Commission must approve the wetland delineation and the scope of work.

It was moved (Holland) and seconded (Deignan) to grant a waiver for 110 Maple Street from the Town of Carlisle Supplementary Sewage Disposal Regulations Section 15.211 Distances – minimum setback to wetland, 100' required, 80' provided, as shown on the above referenced plan based on the findings stated. Motion passed 4-0-0.

It was moved (Risso) and seconded (Deignan) to grant a waiver for 100 Maple Street from the Town of Carlisle Supplementary Sewage Disposal Regulations Section 15.100 General Construction Requirements to allow the continued use of an existing non-conforming system for the demolition and rebuilding of the existing house based on the above findings. Motion passed 4-0-0.

It was moved (Risso) and seconded (Deignan) to close the public hearing. Motion passed 4-0-0.

#### **ADMINISTRATIVE REPORTS continued:**

70 Timothy Lane – Fantasia reminded the Board about this property. The system failed an inspection in 2003. The owners have not upgraded the system nor appear to have any plans to do so. They claim the system is working. Pump outs on file indicated no problems observed. The Board agreed that the owners should do another Title 5 during high water season to evaluate the system, and the owners have been so notified.

21-23 Bedford Road – there has been no response to Building Inspector's Order to secure the property. It is not a Board of Health issue since no one is living in the house.

MRC Ex Com – 4/27/09 7:30 pm

Red Cross Shelter Training – Fantasia is still looking for trainer

Lyme Disease Informational Event – Pat Huckery (DFW), Tiffany Rule (DVM), have agreed to attend. The Board is looking for medical person. Fantasia noted that a number of residents have called with interest. Brem said the presentation should be televised. .

Senior Volunteer – Judy Willard – completed her time. She is interested in re-applying in July.

MDPH Intern – Boston U extended time to respond due to lack of response from its students.

All Hazards Plan – Fantasia is working on the plan. The local CEMP was last revised in 2004 and could use updating.

#### **TOWN OF CARLISLE WATER SUPPLY REGULATIONS**

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The Board reviewed and approved the final draft which incorporated changes suggested at the public hearing.

It was moved (Deignan) and seconded (Risso) to accept the revised Town of Carlisle Water Supply Regulations. Motion passed 4-0-0.

Copies will be distributed to the land use departments with a special thank you to the Planning Board for the comments. The Regulations will be effective as of the vote (4/7/09).

Comprehensive Permit Regulations – Brem asked that the Board submit any additional comments to the Planning Board. The Zoning Board will vote on the revised regulations 4/27/09.

Benfield Farms Development – Brem, Deignan and Fantasia attended the Town Hall Advisory Group (THAG) meeting held on 3/24/09. Brem was appointed chairman. The purpose of the group which consists of board representative and town hall staff is to provide preliminary technical feedback on the proposed development. This group does not take the place of administrative or regulatory review. Plans are still at the conceptual stage and the developer, NOAH, is looking for input from the various municipal departments and committees. Progress notes are available to the Board.

Town Meeting – May 4, 2009. Election May 12, 2009. Hazardous Waste Collection May 30, 2009.

There was no further business. Meeting voted to adjourn at 9:20 p.m.

Respectfully submitted,

Linda M. Fantasia  
Recorder